



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D2745
Job Sheet 184895



Part No: D2745

Job Qty: 100 ea

Part Name: Bushing



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/17/18

Job Tracking No:

Due Date: 11/9/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG REV B IPP C 02.03.07 Update to turn in house NG IPP Rev:D 07-10-23 Removed tumbling JLM Verified By:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	100 Ea	11/9/18	11/9/18	0.00	0.00	Start Up Machining-1		JLD 18/11/19
100	Hardinge	100 pcs	11/9/18	11/9/18	0.01	7.33	Hardinge		"
120	QC	100 pcs	11/9/18	11/9/18	0.00	0.00	QC8		18/11/20
130	Packaging	100 pcs	11/9/18	11/9/18	0.00	0.00	Packaging3-1	FP-001	18-11-20
140	QC21-SA	100 Ea	11/9/18	11/9/18	0.00	0.00	QC21		

Part Op 100 - 1-Turn as per Dwg D2515
Descriptions: 130 - LOCATION : FP001

DAS
21
9-89

NOV 20 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M303R0.750	303 Round Bar 0.750	9.5900 ft (.0959 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M303R0.750	10	86	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Bushing	0.060inches ± 0.010	0.070 0.050		
2	Bushing	0.400inches ± 0.010	0.410 0.390		
3	Bushing	0.060inches ± 0.010	0.070 0.050		
4	Bushing	1.020inches ± 0.010	1.030 1.010		
5	Bushing	0.030inches ± 0.010	0.040 0.020		
6	Bushing	20.000Degrees ± 0.000	20.000 20.000		
7	Bushing	0.472inches ± 0.010	0.482		

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

			0.462
8	Bushing	0.375inches + 0.006 - 0.001	0.381 0.374
9	Bushing	0.560inches $\pm$ 0.010	0.570 0.550
10	Bushing	0.750inches $\pm$ 0.010	0.760 0.740

Plex 10/17/18 2:25 PM Dart.lajeunesse.marie

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date : _____		Step #: _____		MRB (QSI042) Approval																					
Description Work Order <i>Disposition</i>								Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	

1270 Aberdeen Street
 Hawkesbury, ON K6A 1K7
 CANADA
 TEL.: 1 613 832-6200
 Email: sales@dartaero.com
 www.dartaerospace.com

DART AEROSPACE
 Container No: S128863
 Part: D2745
 Job No: 184895
 Serial No/Batch: S128863
 Revision:
 Inspector:
 Exp Date:
 Instructions: Various STC's

Date: 11/19/18

Root Cause			
Environment ☐		No Re-verification ☐	
Design ☐		Operator ☐	
Doc/Data ☐		Offset/Setup ☐	
Equip/Tooling ☐		Supplier ☐	
Handling/Pre ☐		Training ☐	
Material ☐		Use for Testing ☐	
Internal Transport ☐		Poor Information ☐	
Tribal Knowledge ☐		Rushing ☐	
LOA ☐		Product Improvement ☐	
Substation ☐		Process Improvement ☐	
Past Expiry Date ☐		Manufacturing Process ☐	
Misidentified ☐		Past Due ☐	

Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐
---	--	---

Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐

OTHER : _____